

# Union Calendar No. 311

107<sup>TH</sup> CONGRESS  
2<sup>D</sup> SESSION

# H. R. 2733

[Report No. 107-520]

To authorize the National Institute of Standards and Technology to work with major manufacturing industries on an initiative of standards development and implementation for electronic enterprise integration.

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## IN THE HOUSE OF REPRESENTATIVES

AUGUST 2, 2001

Mr. BARCIA (for himself and Mr. EHLERS) introduced the following bill; which was referred to the Committee on Science

JUNE 20, 2002

Additional sponsors: Mr. SMITH of Michigan, Ms. RIVERS, and Mr. GORDON

JUNE 20, 2002

Reported with an amendment, committed to the Committee of the Whole House on the State of the Union, and ordered to be printed

[Strike out all after the enacting clause and insert the part printed in *italie*]

[For text of introduced bill, see copy of bill as introduced on August 2, 2001]

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## A BILL

To authorize the National Institute of Standards and Technology to work with major manufacturing industries on an initiative of standards development and implementation for electronic enterprise integration.

1        *Be it enacted by the Senate and House of Representa-*  
2 *tives of the United States of America in Congress assembled,*

3 **SECTION 1. SHORT TITLE.**

4        *This Act may be cited as the “Enterprise Integration*  
5 *Act of 2002”.*

6 **SEC. 2. FINDINGS.**

7        *The Congress makes the following findings:*

8            (1) *Over 90 percent of United States companies*  
9 *engaged in manufacturing are small and medium-*  
10 *sized businesses.*

11           (2) *Most of these manufacturers produce goods*  
12 *for assemblage into products of large companies.*

13           (3) *The emergence of the World Wide Web and*  
14 *the promulgation of international standards for prod-*  
15 *uct data exchange greatly accelerated the movement*  
16 *toward electronically integrated supply chains during*  
17 *the last half of the 1990’s.*

18           (4) *European and Asian countries are investing*  
19 *heavily in electronic enterprise standards develop-*  
20 *ment, and in preparing their smaller manufacturers*  
21 *to do business in the new environment. European ef-*  
22 *forts are well advanced in the aerospace, automotive,*  
23 *and shipbuilding industries and are beginning in*  
24 *other industries including home building, furniture*  
25 *manufacturing, textiles, and apparel. This investment*

1       *could give overseas companies a major competitive*  
2       *advantage.*

3               *(5) The National Institute of Standards and*  
4       *Technology, because of the electronic commerce exper-*  
5       *tise in its laboratories and quality program, its long*  
6       *history of working cooperatively with manufacturers,*  
7       *and the nationwide reach of its manufacturing exten-*  
8       *sion program, is in a unique position to help United*  
9       *States large and smaller manufacturers alike in their*  
10       *responses to this challenge.*

11               *(6) It is, therefore, in the national interest for*  
12       *the National Institute of Standards and Technology*  
13       *to accelerate its efforts in helping industry develop*  
14       *standards and enterprise integration processes that*  
15       *are necessary to increase efficiency and lower costs.*

16       **SEC. 3. ENTERPRISE INTEGRATION INITIATIVE.**

17               *(a) ESTABLISHMENT.—The Director shall establish an*  
18       *initiative for advancing enterprise integration within the*  
19       *United States. In carrying out this section, the Director*  
20       *shall involve, as appropriate, the various units of the Na-*  
21       *tional Institute of Standards and Technology, including the*  
22       *National Institute of Standards and Technology labora-*  
23       *tories (including the Building and Fire Research Labora-*  
24       *tory), the Manufacturing Extension Partnership program*  
25       *established under sections 25 and 26 of the National Insti-*

1 *tute of Standards and Technology Act (15 U.S.C. 278k and*  
2 *278l), and the Malcolm Baldrige National Quality Pro-*  
3 *gram. This initiative shall build upon ongoing efforts of*  
4 *the National Institute of Standards and Technology and of*  
5 *the private sector, shall involve consortia that include gov-*  
6 *ernment and industry, and shall address the enterprise in-*  
7 *tegration needs of each United States major manufacturing*  
8 *industry at the earliest possible date.*

9       **(b) ASSESSMENT.**—*For each major manufacturing in-*  
10 *dustry, the Director may work with industry, trade associa-*  
11 *tions, professional societies, and others as appropriate, to*  
12 *identify enterprise integration standardization and imple-*  
13 *mentation activities underway in the United States and*  
14 *abroad that affect that industry and to assess the current*  
15 *state of enterprise integration within that industry. The Di-*  
16 *rector may assist in the development of roadmaps to permit*  
17 *supply chains within the industry to operate as an inte-*  
18 *grated electronic enterprise. The roadmaps shall be based*  
19 *on voluntary consensus standards.*

20       **(c) REPORTS.**—*Within 180 days after the date of the*  
21 *enactment of this Act, and annually thereafter, the Director*  
22 *shall submit to the Committee on Science of the House of*  
23 *Representatives and the Committee on Commerce, Science,*  
24 *and Transportation of the Senate a report on the National*

1 *Institute of Standards and Technology's activities under*  
2 *subsection (b).*

3 (d) *AUTHORIZED ACTIVITIES.*—*In order to carry out*  
4 *this Act, the Director may work with industry, trade asso-*  
5 *ciations, professional societies, and others as appropriate—*

6 (1) *to raise awareness in the United States of en-*  
7 *terprise integration activities in the United States*  
8 *and abroad, including by the convening of con-*  
9 *ferences;*

10 (2) *on the development of enterprise integration*  
11 *roadmaps;*

12 (3) *to support the development, testing, promul-*  
13 *gation, integration, adoption, and upgrading of*  
14 *standards related to enterprise integration including*  
15 *application protocols; and*

16 (4) *to provide technical assistance and, if nec-*  
17 *essary, financial support to small and medium-sized*  
18 *businesses that set up pilot projects in enterprise inte-*  
19 *gration.*

20 (e) *MANUFACTURING EXTENSION PROGRAM.*—*The Di-*  
21 *rector shall ensure that the Manufacturing Extension Pro-*  
22 *gram is prepared to advise small and medium-sized busi-*  
23 *nesses on how to acquire the expertise, equipment, and*  
24 *training necessary to participate fully in supply chains*  
25 *using enterprise integration.*

1 **SEC. 4. DEFINITIONS.**

2 *For purposes of this Act—*

3 *(1) the term “automotive” means land-based en-*  
4 *gine-powered vehicles including automobiles, trucks,*  
5 *busses, trains, defense vehicles, farm equipment, and*  
6 *motorcycles;*

7 *(2) the term “Director” means the Director of the*  
8 *National Institute of Standards and Technology;*

9 *(3) the term “enterprise integration” means the*  
10 *electronic linkage of manufacturers, assemblers, sup-*  
11 *pliers, and customers to enable the electronic exchange*  
12 *of product, manufacturing, and other business data*  
13 *among all partners in a product supply chain, and*  
14 *such term includes related application protocols and*  
15 *other related standards;*

16 *(4) the term “major manufacturing industry”*  
17 *includes the aerospace, automotive, electronics, ship-*  
18 *building, construction, home building, furniture, tex-*  
19 *tile, and apparel industries and such other industries*  
20 *as the Director designates; and*

21 *(5) the term “roadmap” means an assessment of*  
22 *manufacturing interoperability requirements devel-*  
23 *oped by an industry describing that industry’s goals*  
24 *related to enterprise integration, the knowledge and*  
25 *standards including application protocols necessary*  
26 *to achieve those goals, and the necessary steps, time-*

1        *table, and assignment of responsibilities for acquiring*  
2        *the knowledge and developing the standards and pro-*  
3        *ocols.*

4        **SEC. 5. AUTHORIZATION OF APPROPRIATIONS.**

5        *There are authorized to be appropriated to the Director*  
6        *to carry out functions under this Act—*

7                (1) *\$2,000,000 for fiscal year 2002;*

8                (2) *\$10,000,000 for fiscal year 2003;*

9                (3) *\$15,000,000 for fiscal year 2004; and*

10               (4) *\$20,000,000 for fiscal year 2005.*

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